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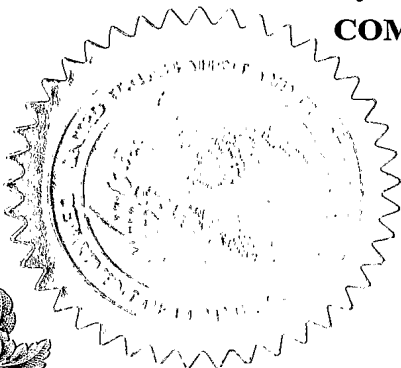
APPLICATION NUMBER: 60/521,579 ✓

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## PRIORITY DOCUMENT

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Certifying Officer

## TRANSMITTAL

Electronic Version v1.1  
 Stylesheet Version v1.1.0

16800 U.S. PTO  
 60/521579

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**Title of  
 Invention**

A method and system for verifying documents.

Application Number:

Date:

First Named Applicant: Mr. Hans Wyssen

Confirmation Number:

Attorney Docket Number:

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Submitted by:	Elec. Sign.	Sign. Capacity
Mr. Hans Wyssen	Mr. Hans Wyssen	Inventor

**Documents being submitted**

us-request

us-fee-sheet

application-body

**Files**

wyssen-usrequ.xml

us-request.dtd

us-request.xsl

wyssen-usfees.xml

us-fee-sheet.xsl

us-fee-sheet.dtd

ABXfinal.xml

application-body.dtd

wipo.ent  
mathml2.dtd  
mathml2-qname-1.mod  
isoamsa.ent  
isoamsb.ent  
isoamsc.ent  
isoamsn.ent  
isoamso.ent  
isoamsr.ent  
isogr3.ent  
isomfrk.ent  
isomopf.ent  
isomscr.ent  
isotech.ent  
isobox.ent  
isocyr1.ent  
isocyr2.ent  
isodia.ent  
isolat1.ent  
isolat2.ent  
isonum.ent  
isopub.ent  
mmlextra.ent  
mmlalias.ent  
soextblx.dtd  
us-application-body.xsl  
Image1.tif  
Image2.tif  
Image3.tif  
Image4.tif  
Image5.tif  
Image6.tif  
Image7.tif  
Image8.tif

Image9.tif

Image10.tif

Image11.tif

**Comments**

Electronic Filing System (EFS) Data  
Electronic Patent Application Submission  
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Application ID: 60521579 \*60521579\*  
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Confirmation number: 1579  
Attorney Docket Number: NONE  
  
Total Fees Authorized: 80.0  
Payment Category: Credit Card  
Credit Card Number: \*\*\*\*\*4474  
Expiration Date: 02282005  
Card Holder Name: wyssen hans  
Postal Code: 99999  
RAM Payment Status: RAM success  
RAM User ID: EFSPROD  
RAM Accounting Date: 2004-05-27  
RAM Sequence Number: 1023049

Digital Certificate Holder: Not trusted entity.

Certificate Message Digest: e82a9a78a0db6fed48ac2c8de8c643cd4d2dd606

Electronic Version 1.1

Stylesheet Version v1.1.1

## Description

### A method and system for verifying documents.

#### BACKGROUND ART

[0001] In recent years communication is increasingly being carried out, online, over the internet. However, it is difficult to determine if the business or person with whom one is corresponding with online is bonafide. In an effort to establish their credentials, online, individuals and businesses often scan diplomas, certificates, permits and the like into electronic image data and display these on web pages at websites. But such electronic images have not proven trustworthy since electronic images can easily be manipulated, and the viewer of such images cannot be certain if such images are trustworthy.

[0002] There exists therefore a pressing need for persons and businesses to establish their credentials in an online environment.

[0003] Additionally, paper documents are increasingly being scanned and the resulting electronic documents stored on machine-readable medium including, but not limited to, floppy diskettes, optical disks, CD-ROMs, and magnet-optical disks, ROMs, RAMs, EPROMs, EEPROMs, magnet or optical cards, or other type of media/machine-readable medium suitable

for storing electronic documents. Electronic documents are increasingly being distributed using the afore-mentioned machine readable media, as well as by electronic mail over computer networks such as the internet. It is well known that modern graphic software programs can be used to fraudulently manipulate documents and even produce authentic looking stamps, seals, signatures which are virtually impossible to detect when viewing electronic documents with a computer monitor. Therefore, when viewing electronic documents it is very difficult to know if signatures, stamps, seals and the like are original, that is, were actually applied to the paper document which was scanned into an electronic document. For example, if the original paper document was notarized, it is difficult or even impossible for a person viewing an electronic image of the document to determine if the notary signature or notary seal were actually applied to the paper document which was scanned.

[0004] Furthermore, due to advances in computerized printing technologies it has become easier to produce fraudulent paper documents. For example, it can even be difficult for a person, when examining an original paper document, to determine if ink stamps, signatures and the like are original, that is, if they were manually applied to the document or if they were fraudulently applied to the document using printing automation, such as, for example, a high resolution color inkjet printer. The same problem arises when viewing document images which were transmitted via fax or facsimile devices.

[0005] Due to the aforementioned, there exists a pressing need for persons

viewing electronic documents as well as hard copy documents to be able to verify the authenticity of such documents. Also, there exists a need for an improved method for persons and businesses to establish their credentials online.

[0006] A prior art method of using the post or courier to mail original paper documents or notarized copies thereof to a plurality of parties suffers from the following problems:

[0007] - is slow and in stark contrasts the today's realities where correspondence is increasingly being carried out using electronic mail.

[0008] - providing original paper documents such as notarized copies is expensive especially when sent to multiple recipients.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0009] The present invention is illustrated by way of example, and not by way of limitation.

[0010] Figure 1 illustrates an exemplary electronic document page to which verification information has been added.

[0011] Figure 2 illustrates an example of verification information which has been added to a signature and a seal which appear on an electronic document.

[0012] Figures 3 - 5 illustrate exemplary electronic pages with document verification information.

[0013]  
Figures 6 - 7 illustrate exemplary methods of referring or linking to



electronic document images which are stored on the repository's server from electronic pages including web-pages.

[0014] Figure 8 illustrates an example of a paper photocopy of a document to which text is added referring to a document which is stored on the repository's web server.

[0015] Figure 9 illustrates an exemplary electronic document page to which verification information has been added.

[0016] Figure 10 illustrates an exemplary electronic document page to which verification information has been added.

[0017] Figure 11 illustrates an exemplary electronic document page to which verification information has been added.

[0018] Reference Numerals in Drawings:

[0019] 10 Mark

[0020] 12 Indicia

## DISCLOSURE OF INVENTION

[0021] The present invention relates generally to the hosting of electronic documents together with verification information supporting their authenticity on a server which is accessible by client computers on an international computer network environment. Paper documents are processed by a repository and scanned into electronic image data. Paper documents are also examined and document verification information

specific to each document generated. Electronic image data generated from paper documents is uploaded together with corresponding verification information to a web server so that persons using client computers can view electronic images of selected documents as well as accompanying verification information. Verification information may include, but not be limited to:

[0022] 1) which signatures, ink stamps, seals and the like were manually applied to the original paper document which was scanned and uploaded.

[0023] 2) evidence that the institution which issued the document is bonafide.

[0024] 3) evidence that information the document contains is accurate and true.

[0025] Several objects of the present invention are to provide a method where persons can check, online, the authenticity of paper documents, including paper copies and electronic images thereof which:

[0026] - substantially speeds up communications by allowing persons to check documents online rather than relying on certified paper documents which must be physically transported. For example, persons may check, online, documents supporting the trustworthiness of an online business such as, for example, an internet auction seller.

[0027]  
- substantially lowers the cost of allowing a plurality of persons to view notarized or certified documents since a single certified or notarized sheet paper document which has been processed with the method and system of the present invention can be viewed online by a plurality of persons. For

example, with the method and system of the present invention it is not necessary to produce and mail a plurality of notarized paper documents to a plurality of persons.

[0028] - increases security since documents are verified by an additional party.

[0029] The present invention may be implemented in the form of an internet based service. The setting up of a web or internet site implementing the method of the present invention will be apparent to those skilled in the art from the teachings herein.

[0030] In the preferred embodiment of the present invention, paper documents including, for example, certificates, diplomas, deeds, contracts, photos, legal documents and the like are collected by a central repository. The repository can be an individual, a company, a governmental entity, an institution, an association or some other organization. The central repository and/or its members may also have certain legal qualifications. For example agents of the central repository may include public notaries or institutions which issue documents, such as for example, schools which issue diplomas.

[0031] The paper documents are scanned into electronic image data using a scanner as is known in the art and the resulting electronic images are uploaded to one or more servers where they can be viewed online by persons with client computers which are connected to an international computer network, preferably the internet.

[0032] An important feature of the present invention is that paper documents

which are scanned are carefully examined, by a verification authority, preferably the repository or an agent thereof and verification information generated. The resulting verification information is made available to the persons who view selected scanned documents online.

[0033] Verification information which appears together with documents enables persons to view, online, evidence supporting the authenticity of selected documents. For example, with the method and system of the present invention, a paper photocopy of a document or electronic image of the document may be verified online.

[0034] In the preferred embodiment, the method of the present invention is a service provided to consumers by a repository. This would preclude the owner of the document or others from tampering with electronic documents and verification information. Persons wishing to check the authenticity of a paper photocopy of a document or an electronic image of a document can visit the web site of the repository and view the image of the electronic document stored there, as well as verification information attesting to the authenticity of the document.

[0035] Verification information can relate to one or more elements of the document. For example verification information may relate to but not be limited to the following elements:

[0036]

- a) Which marks including, but not limited to, signatures, seals, date stamps, ink stamps, embossing and the like are original. Original means that the mark was manually applied to the paper document which was

sent to the repository. An example of an original mark is a signature that was applied by hand using a writing instrument and not with a computerized printing device such as an ink jet printer. Marks that can be flagged include original signatures and stamps which were applied to the paper document by a public notary, legal office or governmental office.

[0037] b) Research giving credibility to persons or institutions named in the document. For example the school which issued the document or the public notary which notarized the document. It is well known that there are many fake or bogus schools which simply sell fake diplomas and certificates.

[0038] c) Research showing that the information contained in the document is accurate. For example, in the case of a diploma, that a certain person graduated on the given date and received a certain credit or degree.

[0039] d) The contact information of one or more persons or institutions mentioned on the document as well as the owner of the document. Contact addresses can be contacted by persons who require further information about a document. For example, the contact information of the institution which issued the document or the public notary which notarized the document may be displayed.

[0040] e) A signed declaration or oath by the owner of the document attesting to its authenticity and accuracy. The signature of the owner making the declaration may also be notarized. Original marks on the declaration may also be flagged as explained in point "a" of this list.

[0041] f) A signed declaration or oath by the repository or representative thereof attesting to its authenticity and accuracy. This declaration may be notarized. Original marks on this declaration may also be flagged as explained in point "a" of this list.

[0042] Additional verification information which may appear together with documents include but are not be limited to one or more items from the following list:

[0043] - The date when the electronic document was uploaded to the web server. This is a time stamp showing that a particular document existed at a certain time.

[0044] - Until what date the document will be available for viewing on the repository's server.

[0045] - The name and contact information of the owner of the electronic document.

[0046] - Table of contents. This is particularly useful if the owner has a plurality of documents stored at the repository.

[0047] - Copyright information as well as terms of use of the repository.

[0048] - Information about the services offered by the repository.

[0049] Verification information may be presented to online viewers in various ways including, but not limited to, the following:

[0050]  
- appear on the electronic document image of the scanned document as a

symbol, stamp or text message. If text boxes are used, it is preferable that they can be opened or closed so as not to interfere with the view of the document. For example pop-up text boxes may be used.

[0051] - appear on one or more separate pages.

[0052] Figure 1 illustrates an example of an exemplary electronic document image which was produced by the repository by scanning the original paper document. Verification information inserted by the repository onto the electronic image data appears as indicia 12. Marks 10 which include signatures, seals, date stamps, ink stamps, embossing that were manually applied to the scanned paper document are flagged with indicia 12 so that persons viewing the electronic document online are informed which marks 10 are original.

[0053] It is preferable that indicia 12 be a distinctive marking so that its meaning is easily discernible for the viewer. For example, indicia 12 may include the word "original" as well as the logo and/or name of the repository. Indicia 12 may include further information about mark 10 such as, for example, original signature, original stamp, or original seal. Indicia 12 may be applied beside mark 10 as shown in figure 1, or over mark 10 as shown in figure 2 where verification information, indicia 12, has been inserted over a signature and over a seal. Indicia 12 may be opaque or translucent so as not to entirely block out mark 10. To make indicia 12 more visible it is preferable to scan documents in black and white or grayscale and indicia 12 contain color so as to stand out, for example, red.

[0054] Indicia 12 may take various forms, for example, mark 10 may be highlighted with a certain color or pattern. Indicia 12 may include a geometric form, such as for example, a circle, square and so on or may be text only. Indicia 12 may also be, for example, a text box or a pop-up text box which can be closed or opened, thereby not interfering with the view of mark 10. The purpose of indicia 12 is simply to indicate which mark 10 is an original signature, ink stamp, date stamp, seal and so on, which was applied to the paper document that was scanned and uploaded to the repository web server. Marks 10 which were photocopied or printed to the paper document which was scanned would not be flagged with indicia 12. Figure 1 shows one mark 10 which was not flagged with indicia 12 because it was not original but rather a photocopy.

[0055] Figure 3 shows an exemplary page with verification information provided by the repository. This page appears together with the electronic document when viewed online. As shown in figure 3 this may include details of verification information generated for a specific document as well as an official declaration by the repository attesting to the accuracy of verification information generated.

[0056] Figure 4 shows an exemplary page with verification information provided by the owner of the document. This page appears together with the electronic document when viewed online. As shown in figure 4 this can include contact information of persons and institutions named in the document. Such contact addresses may be

[0057] contacted by viewers who have questions about the document.



[0058] Figure 5 shows an exemplary electronic cover page with verification information which may appear with one or more documents belonging to the same owner. As shown in figure 5 the verification information can inform the online viewer until what date the document(s) will be available for viewing on the server and that the document images are not valid unless viewed at the repository's web site. Contact information of the owner of the documents can also be included, as well as a table of contents listing the names of documents available for viewing.

#### [0059] OPERATION

[0060] In the preferred embodiment a repository business provides verified document hosting services to a plurality of individuals and businesses. Paper documents are collected by the repository or an agent of the repository. If the paper document is sent by mail it is preferable not to send the original document to the repository but rather a notarized or certified true copy since documents may be lost or damaged in the mail.

[0061] Since in the preferred embodiment verification information includes the flagging of marks 10 which are original, it is preferable to send documents to the repository which include original marks 10 which would subsequently be flagged with indicia 12.

[0062] Before sending a paper document to the central repository the consumer will determine which certifying authority should manually apply marks 10 to the paper document as originals which would be flagged by the central repository with indicia 12. Among the factors which will play a role in

determining who should apply marks 10 in an original form are:

- [0063] - The geographical location of the party who desires to view the certified document. For example, it may be required that the document be notarized by a public notary from a certain country or state.
- [0064] - The type of certification. In the case of a school diploma it would be advantageous that the certifying authority be the school which issued the diploma. In other cases where only a timestamp or proof that a document existed at a certain time, as in the case of intellectual properties, a public notary or the date when the repository uploaded the document will suffice. If a photograph is to be certified as a true likeness of a certain individual, a public notary, medical doctor, or other certifying agent may certify this by comparing the photograph with the photograph in an official document such as a passport or drivers license.
- [0065] - The requirements of those wishing to view a certified document. For example, the party wishing to view the certified document, online, may require that certain documents such as a birth certificate are stamped by a specific government agency. In other cases the document may be certified or witnessed by, for example, a medical doctor, judge or bank officer. In other cases a certified true copy by the institution which issued the document may be required.
- [0066]
- In order to determine which marks 10 on the paper documents are original and consequently flagged with indicia 12, the repository may use, for example, magnification. For example, if a signature was manually applied

to the paper document using a writing instrument, magnification would reveal depressions in the paper which would not occur if the signature had been printed with an inkjet printer. If a non-ink pressure stamp embossing seal has been applied to the paper document it is preferable that this be made visible on the electronic document. One effective method to do this is to lightly rub over the embossing with the side of a pencil before scanning. If the paper document has been marked with ultraviolet or infrared ink it is desirable to expose the paper document to ultraviolet or infrared radiation during the scanning process so that any such markings are also visible in the resulting electronic document. Marks 10 which meet the criteria of being original, are marked with indicia 12 in the uploaded electronic document.

[0067] Consumers may provide additional verification information along with paper documents that they send to the repository for uploading. Such information is preferably also made available to online viewers as verification information. This may include, but not be limited to:

[0068] - contact addresses of individuals or institutions named in the document. For example, the contact information of the institution which issued the document or the public notary which notarized the document. This information may appear as verification information when viewed online as shown in figure 4. People who view the document online may then contact such addresses for further information.

[0069] - a declaration by the owner of the document stating that the document is accurate, belongs to the owner and that the owner has the right to display

it. Figure 9 illustrates an example of such a declaration. The statement may be signed by the owner and the signature notarized. Marks 10 which are original on this declaration document may also be flagged with indicia 12.

[0070] Additionally, the repository may, as shown in figure 3, include a document report which is also made available to online viewers as verification information. The report may include, but not be limited to, the following:

[0071] - a statement verifying that only marks 10 which were manually applied to the scanned paper document were flagged with indicia 12 and that the document has not been altered since the date it was uploaded.

[0072] - Research results verifying the accuracy of the document. For example the repository may contact one or more of the contact addresses that the owner provided and report the results.

[0073] After the paper documents have been processed by the repository they can either be returned to their respective owners or destroyed.

[0074] At present, the preferred format for storing electronic documents on the web server of the repository is the PDF format. This format has gained widespread acceptance among authors, distributors, and publishers. Portable Document Format (PDF) developed by Adobe Systems, Inc. of San Jose, Calif. PDF is a page description file format which describes the visual appearance of a document's physical page, including fonts and special characters, images, and layout. PDF keeps the design of a page fixed and communicates the physical structure through visual cues such

as fonts and font size, indentation, and placement on a page or screen. Further, PDF allows for sophisticated typography, non-Roman alphabets, and mathematical and chemical equations. Thus, PDF files are a preferred file format for storing electronic documents on the web server.

[0075] A desirable feature of the PDF format is that a plurality of pages can be stored in one document file. For example, a plurality of electronic documents belonging to one consumer as well as accompanying pages with verification information may be stored in one PDF file.

[0076] A suitable method for applying indicia 12 to electronic documents is the "stamp tool" in the Adobe Acrobat PDF editing program. While this method has been found to be suitable, other methods may also be used. For example, before scanning, the paper document may be stamped by hand with an ink stamp to produce indicia 12 so that when the resulting paper document is scanned, indicia 12 is visible in the resulting electronic image file.

[0077] In Adobe Acrobat, the "note tool" can also be used to insert verification information to electronic documents. The "note tool" message can be closed so as to avoid interfering with the view of the document. The PDF format also allows verification information to be embedded as audio and video messages. For example, a video or sound track of an individual receiving the diploma displayed in the PDF file may be made available to online viewers. In another example a letter of recommendation by a former employer may include a sound track from a former employer recommending the person.

[0078] Since a plurality of pages of electronic documents and pages with verification information can be stored in one PDF file, it is advantageous to insert navigational aids into the PDF document file. For document files which are in the PDF file format this can include one or more of the following:

[0079] - PDF bookmarks: This feature is supported in PDF readers such as Adobe Acrobat Reader where so called bookmarks are listed in a separate frame. Bookmarks may be linked to individual documents or pages with verification information within a document file. A bookmark may, for example, be named after the document to which it is linked. For example: "My Photo" or "High School Diploma".

[0080] - Hyperlinks may also be used within a PDF document file. For example a cover page with a table of contents, as illustrated in figure 5, can include hyperlinks to the enclosed documents.

[0081] In the preferred embodiment, document files are stored on a server as individual files with unique identifying file names. The name of the document file may be numeric, alphabetic or alphanumeric. For example: "20001.pdf".

[0082] In the preferred embodiment persons can view selected electronic documents using remote computers which are connected to the internet using web browser software such as, for example, Microsoft Explorer. Software plug-ins for viewing various graphic files including PDF are widely available for web browsers.

[0083] In the preferred embodiment, before the document file containing one or more electronic documents and information pages is uploaded to the server the following security features are applied to the PDF file:

[0084] - No extraction of elements from the document including seals and pictures.

[0085] - No changing of the document.

[0086] Other security features which may be added include:

[0087] - User password for opening the document. This will prevent unauthorized persons from viewing the document. This can be optional depending on the needs of the owner of the document file.

[0088] - Printing not allowed.

[0089] - Master password for changing the document. This password is preferably only known by the repository.

[0090] It is also to be noted that new security features are being invented and that these may also be implemented. For example, new security features may include the following features:

[0091] - not allow persons to redistribute or save document files to electronic media on a remote computer.

[0092] - require separate open passwords for individual documents or pages within a PDF document file.

[0093] - not permit a document to be opened after a certain expiry date.

[0094] After the paper documents are scanned they can either returned to their respective owners or destroyed.

[0095] Electronic files with documents and verification information are stored on a web server where they can be viewed using client computers as is known in the art. The client server computer environment is preferably an international computer network such as the internet. In the preferred embodiment the web-site or URL (universal record locator) where the document images are stored belongs to the repository. For example [www.swisscertified.com](http://www.swisscertified.com). Due to security considerations, in the preferred embodiment, the server where the documents are stored is protected with security as is known in the art. This may include, for example, a fire wall. SSL technology (Secure Sockets Layer) may also be used to create an encrypted link between the server and remote computers which connect to the web site of the repository in order to view certified documents. It is important that the server be secured to prevent manipulation by anyone other than those authorized by the repository. People who view electronic documents on the server must have the certitude that the documents have not been tampered with in any way by unauthorized persons including the owner.

[0096] In the preferred embodiment, the website of the repository incorporates a user interface that enables persons to view selected electronic documents. For example, when visiting the web site of the repository, a person wishing to view an electronic document in document file 20001.pdf would enter the name of the document file "20001" in a form field on a web



page. After pressing enter or clicking a button, the selected document file is opened from within the web browser by the PDF reading plug-in and the document file is opened. If the document file is protected with an open password, the user is prompted for the password before opening.

[0097] It is to be noted that while PDF is the present preferred format for storing electronic documents on the computer server, known in the art are other file formats that may also be used. These include:

[0098] Tagged Image File Format (TIFF), JPEG, JPEG 12 Lossy, JPEG 12-8 Lossless, P-JPEG, Audio Video Interleave (AVI), (JPEG File Interchange Format) JFIF, Delrin Winfax, PCX (ZSoft Paint format), TGA (Truevision (Targa) File Format), Portable Network Graphics (PNG), DCX, G3, G4, G3 2D, Computer Aided Acquisition and Logistics Support Raster Format (CALS), Electronic Arts Interchange File Format (IFF), IOCA, PCD, IGF, ICO, Mixed Object Document Content Architecture (MO:DCA), Windows Metafile Format (WMF), ATT, Windows Bitmap Format (BMP), BRK, CLP, LV, GX2, IMG(GEM), IMG(Xerox), IMT, KFX, FLE, MAC, MSP, NCR, Portable Bitmap (PBM), Portable Greymap (PGM), SUN, PNM, Portable Pixmap (PPM), Adobe Photoshop (PSD), Sun Rasterfile (RAS), SGI, X BitMap (XBM), X PixMap (XPM), X Window Dump (XWD), AFX, Imara, Exif, WordPerfect Graphics Metafile (WPG), Macintosh Picture (PICT), Encapsulated PostScript (EPS), Graphics Interchange Format (GIF). Of course, as new image formats are introduced, it could be advantageous to use these as well using the method of the present invention.

[0099] Password programs are also widely available that can encrypt web

content and pages so that they can only be viewed by authorized persons and also be protected against unauthorized manipulation.

[0100] While in the preferred embodiment images of paper documents are stored on the network server in individual document files, known in the art are other methods that can be used to make electronic documents together with verification information available for viewing with client computers within a server/client computer network such as the internet. For example, images of documents and pages with verification information can be stored in one database file rather than in numerous separate files. This method has the advantage that rather than maintaining a complex file structure with potentially millions of separate files, an efficient database can be maintained that is designed to get information into memory quickly to provide fast access to the document images and verification information. Online users with client computers can select electronic documents which they wish to view as is known in the art.

[0101] In the preferred embodiment consumers are charged for services rendered by the repository. For example the repository may charge the consumer a fixed processing fee per document page. Such a processing fee can include the following services:

[0102] - Scanning the paper document into an electronic format.

[0103] - Analyzing the document for original signatures, stamps and seals and flagging such original marks with indicia 12 in the resulting electronic document image.

[0104] - Hosting the electronic document and accompanying verification information on a web server.

[0105] The repository can offer consumers additional services which may include one or more of the following:

[0106] - Research services. For example investigating if an institution which issued the document is legitimate and verifying the accuracy of information contained in documents. The results are added to verification information which appears with the uploaded document. An exemplary page with research information is illustrated in figure 3.

[0107] - Adding or deleting electronic documents from a consumer's document collection.

[0108] - Adding or changing security settings including open passwords.

[0109] The present invention can be used by consumers in various ways. After the paper documents have been processed into electronic documents and are uploaded together with verification information to a web server, their owners can allow selected persons or parties to view the verified documents at the repository's website.

[0110] Documents which are uploaded to the repository's server may be referred on hard copy documents as shown but not limited to, the following examples:

[0111] - paper photocopies of documents may include instructions as to how to view a certified copy online. For example, the owner may insert the

following text to the photocopy: "Please see a certified copy of this document at: [www.swisscertified.com/20001.pdf](http://www.swisscertified.com/20001.pdf) (password 1A236) or "To view a certified copy of this document please visit [www.swisscertified.com](http://www.swisscertified.com) (Document: 20001 Password: 1A236)" An example of this method is illustrated in figure 8.

[0112] - In letters, resumés, CV's and brochures which are printed on paper a text only message referring to the uploaded document may be inserted. For example: "Please see a certified copy of my high school diploma at [www.swisscertified.com](http://www.swisscertified.com) (Document: 20001 Password: 1A236)"

[0113] Documents on the repository's server may also be referred to from electronic pages. For example electronic pages stored on web-sites or on removable media such as compact discs may refer to documents stored at the repositories website. The present invention will be useful for internet based businesses who wish to establish their credentials in an online environment. This includes, for example, websites which sell products and services. This would include online auction sellers who can refer to trust building documentation stored at the repository's website from their auction listings. The present invention will also be useful for persons who wish to establish their identity and credentials in an online environment such as, for example, those looking for a partner using an online dating service. The electronic pages which refer to documents stored at the repository web-site may be in formats including HTML, PDF, MSWORD and as well as others. An effective method to access documents on the repository's server from electronic pages is to use hyperlinks. For

example, a hyperlink may be created between an electronic page to the homepage of the repository or, if the document is stored in a separate file on the repository's server, the hyperlink may be linked to the URL of the file containing the document. The creation of hyperlinks within HTML pages, PDF documents, MSWord documents is well known in the art. Examples follow which illustrate the aforementioned methods:

[0114] - In a "text only" email message the owner writes: "Please see a notarized copy of my high school diploma at [www.swisscertified.com](http://www.swisscertified.com) (Document: 20001 Password: 1A236)".

[0115] - In a "text only" email message the owner writes: "Please click on the following hyperlink to see a notarized copy of my high school diploma: [www.swisscertified.com](http://www.swisscertified.com) (Document ID: 20001)". The URL is linked to the home page of the repository's server where there is a user interface which includes a field where the user can enter the document id in order to open the selected document file.

[0116] - In a "text only" email message the owner writes: "Please click on the following link to see a Swiss Certified copy of my high school diploma." The hyperlink is linked to the URL of the document file: "<http://www.swisscertified.com/upload/20001.pdf>".

[0117] - An internet auction seller includes the following text message on auction listings or on web pages of the seller's website: "To view a Swiss Certified copy of my Automobile Seller's License CA please visit [www.swisscertified.com](http://www.swisscertified.com) (Document: 20001)"

[0118] - As illustrated in figure 6 an online business can include a logo and a text message on web pages such as, for example, auction listings. For example: "We are members of the Good Business Bureau. To view our verified certificate please click here. " The logo graphic and text message may be linked to the URL of the PDF file containing the document with a hyperlink.

[0119] - As illustrated in figure 7 an electronic page such as a web page can have an image of the document as well as a graphic logo from the repository with the message. "Swiss Certified E-Document". A text message is also included: "Please click on the above logo to view a verified copy of this document." Hyperlinks link both the logo graphic and the text message to the URL of the PDF file on the repository's server where the document and accompanying verification information is stored. For example:  
"http://www.swisscertified.com/upload/20001.pdf"

[0120] Further information about how the present invention can be used by consumers can be seen from the following example:

[0121] A person graduates from a university, receives a diploma and wants to find employment. The graduate visits the website of the repository and purchases a document file which is in PDF format and is accessible on the repository's server at: [www.swisscertified.com/20001.pdf](http://www.swisscertified.com/20001.pdf) with client computers on the internet.

[0122] The number "20001" is the document file's ID. The repository also provides the graduate with a customer password, which is required by the

repository when, for example, adding or removing documents from the document file.

[0123] The graduate pays US\$ 50.00 for the installation of document file 20001.pdf which includes a one year hosting subscription for being accessible on the internet server of the repository. The hosting subscription can be extended. File 20001.pdf consists of only a cover page with the contact information of the graduate.

[0124] After the installation of document file 20001.pdf, the graduate sends a notarized paper copy of the diploma to repository along with an order form which includes the document file ID, 20001.pdf and customer password. The repository scans the diploma and saves it as a PDF file. The repository also flags the public notary's signature and seal with indicia 12 using the Adobe Acrobat stamp tool. The resulting PDF image is then appended to document file 20001.pdf which is on the web server. The repository bills the graduate US\$ 10.00 for the one page upload as well as US\$9.00 for returning the paper document via registered first class mail to the graduate.

[0125] As illustrated in figure 8, the graduate adds a paper photocopy of the diploma to the resume or CV which is sent by mail to prospective employers. On the photocopy the graduate writes: "To view a verified copy of this document please visit: [www.swisscertified.com](http://www.swisscertified.com) (Document 20001)".

[0126] As illustrated in figure 7, on a website the graduate creates a web page with a description of qualifications and includes an image of the diploma

as well as a logo from the repository. The graduate also creates a hyperlink to the URL of the file containing the document on the repository's web server "www.swisscertified.com/20001.pdf" so that when someone on clicks the logo document file 20001.pdf is opened.

[0127] The graduate also prepares a résumé as a PDF file and adds hyperlinks to the URL of the file stored on the repository's website. The graduate distributes the PDF file via email as an email attachment. The graduate also distributes compact disks or CD's on which the PDF with hyperlinks is stored.

[0128] A potential employer upon receiving the CV of the graduate, in paper form, sees the photocopy of the diploma and visits the repository's website, and is presented with a web page with a form field where the document ID can be entered. After entering the document ID and pressing enter, document 20001.pdf is opened within the internet browser using the Adobe Acrobat Reader plug-in and the verified copy of the diploma and accompanying verification information can be viewed.

[0129] Another person who received the résumé as an email attachment opens the PDF file attachment with Adobe Acrobat and clicks on the hyperlink to the URL of the document file, 20001.pdf on the repository server thereby opening the file and viewing the verified copy of the diploma.

[0130] Another person sees the graduate's listing on a web-site and clicks a hyperlink which is linked to the URL of document file 20001.pdf on the repository server thereby opening it.



[0131] While the method of the present invention may be sold, as a service directly by the central repository to customers, representatives may also be appointed by the central repository to sell the service to customers. Representatives of the repository may include certification authorities such as, for example, public notaries and organizations which issue documents.

[0132] For example, public notaries can provide a service to their customers where, after they notarize documents, they send documents to the central repository for processing according to the method of the present invention. Also, organizations which issue documents such as, for example, schools which issue diplomas may provide a service to their students whereby they send such documents to the central repository.

[0133] Representatives of the repository may either physically send documents to the central repository or transmit images electronically to the repository using for example, fax or email. It is preferable that documents are transmitted electronically to the central repository rather than physically sending documents since this speeds up the process. Examples follow which illustrate how the method of the present invention may be incorporated when the central repository works with representatives:

[0134] Example 1:

[0135] After receiving a document which has been faxed by a notary who is a representative, the repository inserts indicia 12 into the document image, flagging marks 10 which were applied by the notary who faxed the document. Figure 10 illustrates a diploma which was transmitted by fax to

the central repository by a notary who is a representative of the repository and who's notary marks have been flagged by indicia 12 in the uploaded document.

[0136] Together with the document, the central repository also uploads a page with verification information which includes the contact information of the notary as well as a declaration by the central repository with the following text:

[0137] "Wyssen Systems International (SwissCertified Division) of Zurich, Switzerland, hereby makes the following declaration of certification for the document stored in this protected file:

[0138] 1) The enclosed document was notarized by the above named certification authority who is an official agent of Wyssen Systems.

[0139] 2) The enclosed document was transmitted directly to us by above named certification authority using either fax or email. The above named certification authority being identified as the sender with a unique code which was transmitted along with the enclosed document.

[0140] 3) The enclosed document has not been altered since the official time stamp at the top of each document page.

[0141] 4) Signatures, stamps and seals marked "SwissCertified Original" where applied by the above named certification authority to the enclosed document."

[0142] Example 2:

[0143] After receiving a diploma which has been faxed by the school which issued the document, and which is a representative of the repository, the repository inserts the text "Swiss Certified Document" onto the document image which is uploaded. Figure 11 illustrates a diploma which was faxed to the central repository by a representative, a school, and to which the verification information "Swiss Certified Document" was added. Together with the document, the central repository also uploads a page with verification information which includes the contact information of the school as well as a declaration of certification by the central repository with the following text:

[0144] "Wyssen Systems International (Swiss Certified Division) of Zurich, Switzerland, hereby makes the following statement for the document stamped "Swiss Certified Document" stored in this protected file:

[0145] 1) The enclosed document stamped "Swiss Certified Document" was issued by the above named certification authority who is an official agent of Wyssen Systems.

[0146] 2) The enclosed document was transmitted directly to Wyssen Systems by the above named certification authority using either fax or email. The above named certification authority being identified as the sender with a unique code which was transmitted along with the enclosed document.

[0147] 3) The enclosed document has not been altered since the official time stamp at the top of each document page."

[0148] In the afore-mentioned examples 1 and 2, since the central repository

does not examine the original document when transmitted electronically, various safeguards are preferably built into the system in order to make sure that the document is transmitted by the representative of the repository, who also acts as the certification authority for the uploaded document. These may include one or more from the following list:

[0149] - Each time documents are sent electronically to the repository by an agent, a cover page is included which includes one or more unique passwords known only by the trusted agent and the repository.

[0150] - Documents may be sent to a secret fax number only known to the trusted agent.

[0151] The following example illustrates a 3 step business model which may be used by the central repository when working with representatives including, for example, public notaries and schools:

[0152] Step 1 of 3:

[0153] The repository delivers transmittal cover pages to representatives which are used when electronically transmitting documents to the central repository, such as, for example, when faxing. One cover page is used each time one or more documents are transmitted for a customer to the central repository. Cover pages may be delivered to the agents as paper hard copy pages or as electronic data files such as, for example, in the PDF format, which are then printed out on paper sheets by the agent. After transmitting documents along with the cover page to the repository, it is preferable that the cover page be given to the customer along with

documents transmitted. Transmittal cover pages may include one or more items from the following list:

- [0154] - a unique code which becomes the document ID and also enables the repository to identify the representative transmitting the document.
- [0155] - A place where an open password can be given if the customer wants this.
- [0156] - The identity of the representative or agent of the repository along with contact information.
- [0157] - A place where the contact information of the customer can be entered.
- [0158] - An owner or master password which the customer can give the repository when deleting the document file or making other changes such as, for example, changing or adding a password.
- [0159] - Detailed customer instructions in using the service.
- [0160] - Instructions on how to extend the hosting subscription.
- [0161] An example of the text on a cover page follows:
- [0162] "Your File's ID is: abc2
- [0163] Open Password (optional): \_\_\_\_\_
- [0164] Open Password: You can give a password in order to allow only selected persons to open your document. In many cases a password is not necessary. If you do not want a password leave blank.

[0165] Swiss Certified File Information:

[0166] Within 24 hours your document will be able available for online verification at this internet address:

[0167] <http://www.swisscertified.com/docs/abc2.pdf>

[0168] or by visiting [www.swisscertified.com](http://www.swisscertified.com) and entering your file ID: abc2

[0169] Your Master Password is: 235674 (Please do not give this password to anyone since it is only required by us if you make changes to your file, such as when changing or adding an open password or deleting your document file.)

[0170] Customer Instructions:

[0171] 1) For web-pages, online auction listings, as well as files (e.g. Word, PDF) on removable media such as CD's, create a hyperlink to the URL (internet address) of your Swiss Certified document file (see above). For example you may link a text message such as: "Please click here to view of certified copy of my diploma." You may also place the text message over an image of your document and then link to your Swiss Certified file. If creating a hyperlink is not possible, simply use a text message such as: To view a certified copy of my diploma please visit [www.swisscertified.com](http://www.swisscertified.com) (document: abcd password: test)."

[0172] 2) On paper hardcopy such as printed letters, brochures and photocopies you can include a message such as: "To view a certified copy of my diploma please visit [www.swisscertified.com](http://www.swisscertified.com) (document: abcd password:

test)". You can also print the text on a photocopy or fax of your document.

[0173] 3) Your document will be available for online verification at [swisscertified.com](http://swisscertified.com) for a period of 6 months. You can renew your hosting subscription for additional 6 month periods by visiting [www.swisscertified.com](http://www.swisscertified.com) and following the instructions under "customer support".

[0174] For further instructions please visit: [www.swisscertified.com](http://www.swisscertified.com). If you have any questions you may either ask our agent or contact us at:

[0175] Wyssen Systems International

[0176] Swiss Certified Division

[0177] Schweighofstrasse 405a

[0178] 8055 Zurich

[0179] Switzerland

[0180] Tel. + 41 1 450 85 60

[0181] Fax + 41 1 450 85 61

[0182] Email: [contact@swisscertified.com](mailto:contact@swisscertified.com)

[0183] [www.swisscertified.com](http://www.swisscertified.com)"

[0184] The following is an example of a text message with instructions that the central repository can give its representatives when delivering one or more transmittal cover pages in a data file:

[0185] "1) Print out this entire file and then delete it in order to prevent it from being printed twice!

[0186] 2) For security reasons, all documents must faxed to us by you and NOT the customer.

[0187] 3) Please fax the cover page along with the document to our document fax number:

[0188] 050 1212 12 12 12 (This number is confidential and not be given to customers)

[0189] If you have any questions please contact us at:

[0190] Wyssen Systems International

[0191] Swiss Certified Division

[0192] Schweighofstrasse 405a

[0193] 8055 Zurich

[0194] Switzerland

[0195] Tel. + 41 1 450 85 60

[0196] Fax + 41 1 450 85 61

[0197] Email: [contact@swisscertified.com](mailto:contact@swisscertified.com)

[0198] [www.swisscertified.com](http://www.swisscertified.com)"

[0199] Step 2 of 3:



[0200] The representative sells the service to its customers. For example, if the representative is a notary, a sign with the following text may be used:

[0201] "Your notarized documents can now be verified online. No need to send the original notarized paper document. Send a photocopy, fax or email instead and let people verify online.

[0202] Price: Only \$12.95 per page

[0203] Your document will be available at [SwissCertified.com](http://SwissCertified.com) for online verification for 6 months (can be extended)"

[0204] Step 3: of 3:

[0205] At the end of each month or after a fixed number of uploaded pages the central repository invoices its representatives for each uploaded page. For example, \$3.00 per page. The repository can charge its representatives a low price since in many cases customers will choose to renew their hosting subscriptions and the repository will charge the customers directly.

[0206]

As can be seen from the foregoing, the method the present invention is useful in establishing trust in online communications where the inherent anonymity of the internet has resulted in a huge increase in fraudulent activities. For example, using the method of the present invention allows businesses to make available their credentials and qualifications much as brick and mortar businesses do by hanging certificates, diplomas and the like on the walls of their establishments thereby attesting to their qualifications. An example of this is the doctor's diploma in the waiting

room, the vehicle sales permit which hangs in an automobile salesman's office, the ISO Certification which hangs in the offices of manufacturing companies and so on. The present invention also saves money for people since they no longer have to send original certified documents but rather can send a fax, electronic document or photocopy of their document instead and people can verify the document online. The present invention also speeds up the verification process since with the method of the present invention documents can be verified online rather than by physically transporting paper documents.

[0207] In the foregoing specification, the invention has been described with reference to specific embodiments thereof. It will, however, be evident that various modifications and changes may be made thereto without departing from the broader spirit and scope of the invention. The specification and drawings are, accordingly, to be regarded in an illustrative rather than a restrictive sense.

## Claims

[c1]

This is a provisional application and does not include claims.

# **A method and system for verifying documents.**

## **Abstract**

A method and system for verifying the authenticity documents using an international computer network. Documents are processed by a central repository and verification information supporting their authenticity generated. Paper documents are scanned into electronic image data and uploaded together with verification information to a server where they can be viewed by persons using client computers on an international computer network.

Figure 1

Hazelton Public High School  
Hazelton, Canada

John B. Sample

Having satisfactorily completed the requirements for graduation from the Hazelton High School as prescribed by the faculties and approved by the board of education is thereby entitled to receive this

Diploma Nr. 12345

June 1979



10

Attestation of a Copy of a Document

I certify that this is a true and correct copy of the original document in the possession of John B. Sample - High School diploma.

Dated: January 10, 2002.

*John Notary*

John Notary  
Notary Public

10

Certified Original

Certified Original

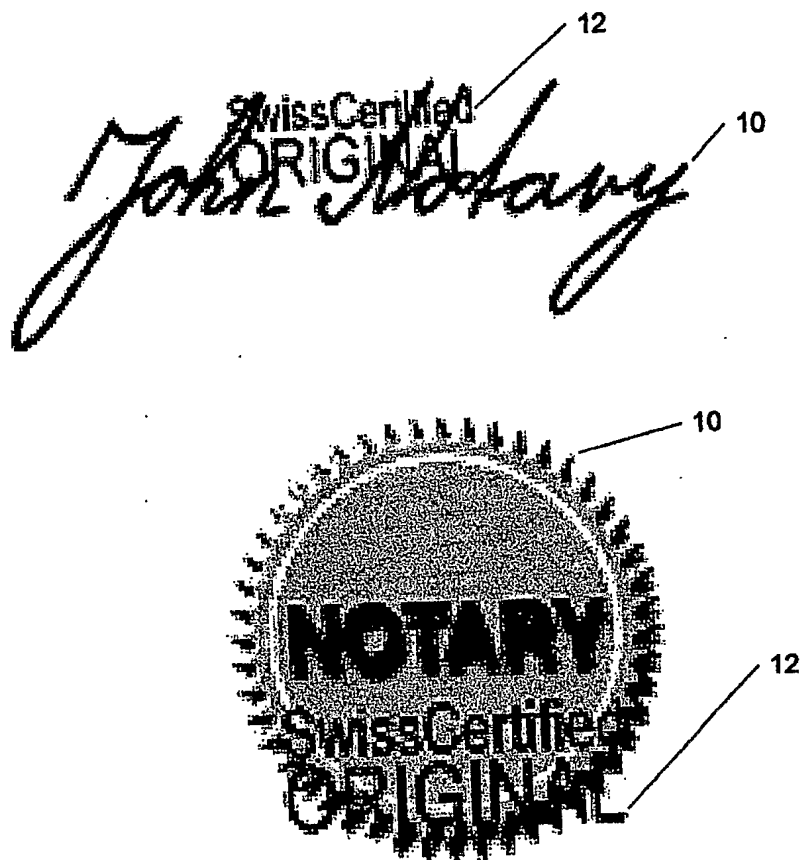


10

12

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Figure 2



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### Figure 3

#### Document Declaration by Wyssen Systems:

Document Name: High School Diploma

Document ID: 10010.1

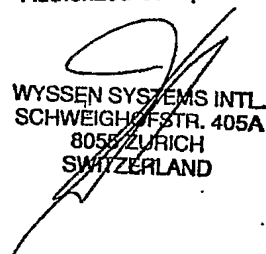
Total number of pages sent by owner for scanning: 2

Time Stamp: 18.08.2003

Wyssen Systems International (SwissCertified Division) of Zurich,  
Switzerland, hereby certifies that:

- Signatures, stamps and seals marked "SwissCertified Original" were manually (by hand) applied to the original paper document that we scanned and NOT with reprographic, automated or computerized systems.
- On June 24, 2003 we contacted the municipality of Hazelton (Tel. 011 123453) which confirmed that the Hazelton Public High School is a legitimate public high school.
- On June 24, 2003 we contacted the Hazelton Public High School (Tel. 011 123451) and it was confirmed John B. Sample did graduate from this school in June 1987, receiving his high school diploma.
- The document has not been altered since the time stamp above.

Authorized Stamp and Signature:

  
WYSSEN SYSTEMS INTL.  
SCHWEIGHOFSTR. 405A  
8058 ZÜRICH  
SWITZERLAND

---

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## Figure 4

### Document Contact Information

**Document Name : High School Diploma**

**The following contact addresses have been supplied by the owner of this document and may be contacted in case of questions:**

#### **Contact 1**

**Type: Institution that issued the document.**

**Name: Hazelton Public High School**

**Street: Main Street 10**

**City/Zip Hazelton, British Columbia**

**Country: Canada**

**Telephone: 011 123451**

#### **Contact 2**

**Type: Public Notary which notarized the document**

**Name: John Notary, Notary Public**

**Street: Pine Cone Street 3**

**City/Zip: Hazelton**

**Country: Canada**

**Telephone: 011 123452**

#### **Contact 3**

**Type: Government Office**

**Name: Municipality of Hazelton**

**Street: Main Street 35**

**City/Zip: Hazelton**

**Country: Canada**

**Telephone: 011 123453**

---

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### Figure 5

Document File Nr. 20001

**Documents displayed here are only valid if:**

- 1.Today's date is before: January 15, 2003
- 2.The internet address displayed on your browser begins with **www.swisscertified.com** or **www.swisscertified.org/**

**Owner Information:**

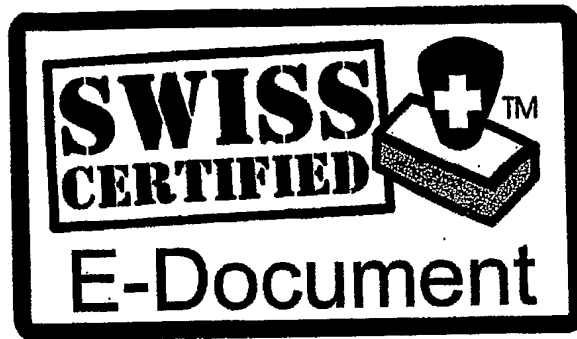
**John B. Sample**  
**Main Street 230**  
**Hazelton**  
**Canada**

**Table of Contents (click on the document you wish to open):**

- My High School Diploma
- My Photograph
- Better Business Bureau Certificate

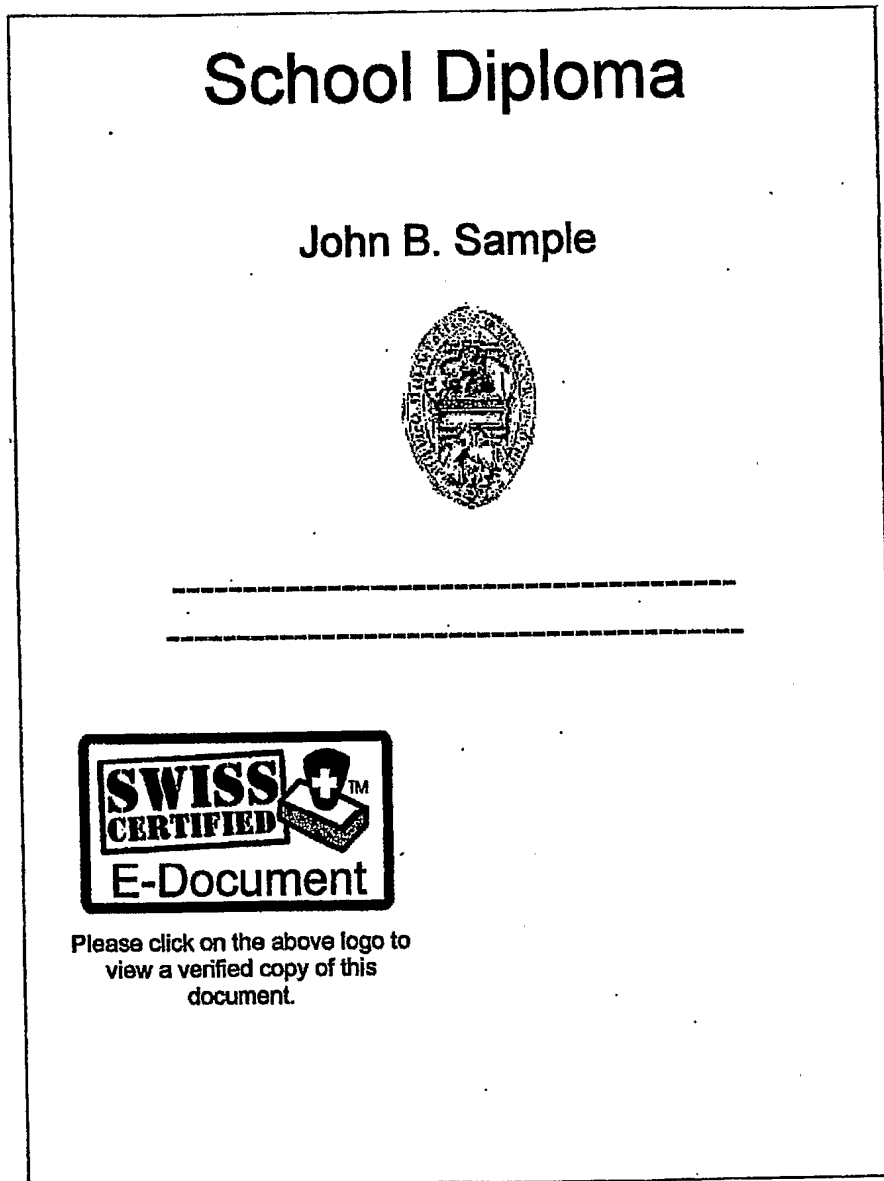
**BEST AVAILABLE COPY**

**Figure 6**



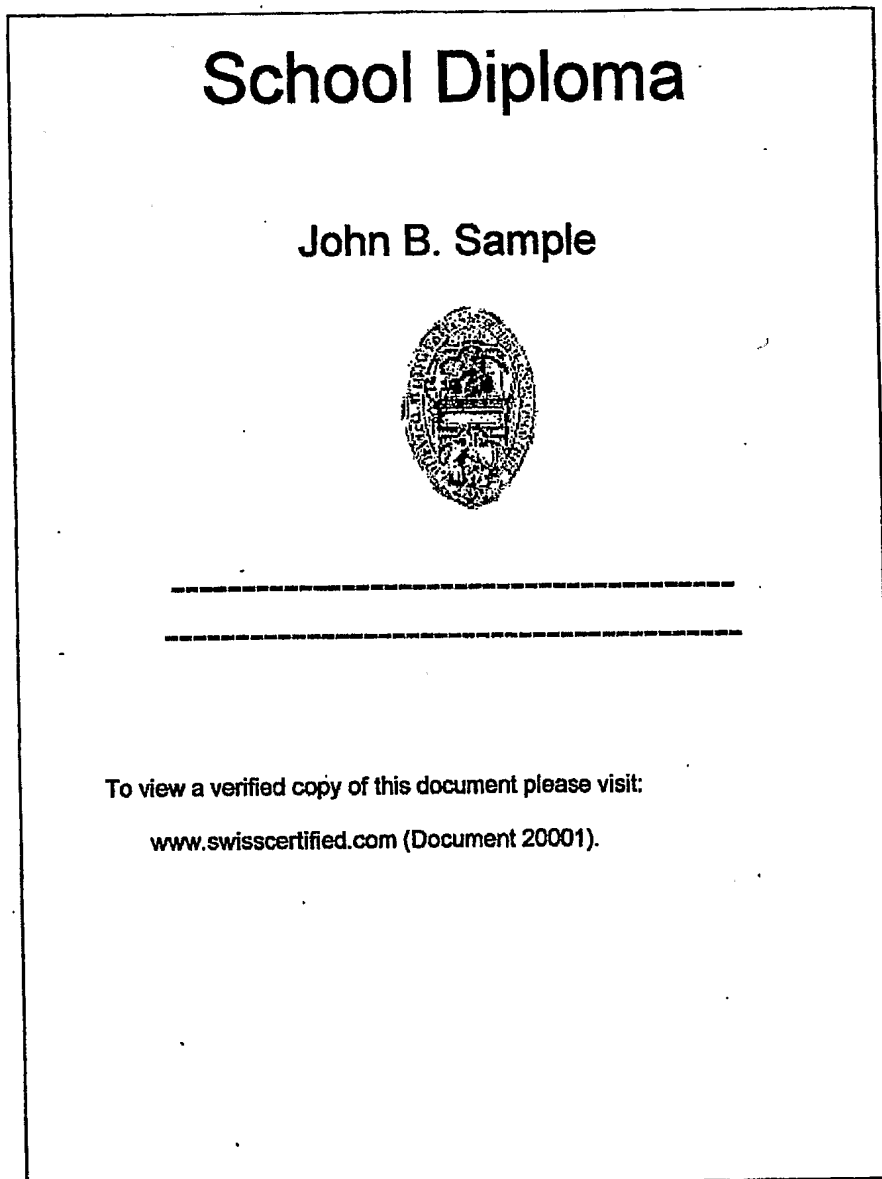
**We are members of the "Good Business Bureau"  
To view our verified certificate please click here.**

Figure 7



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Figure 8



## Figure 9

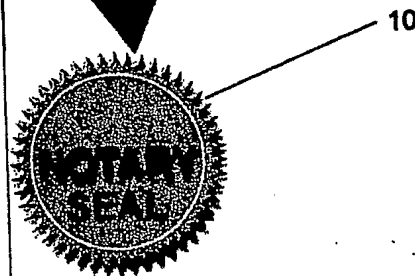
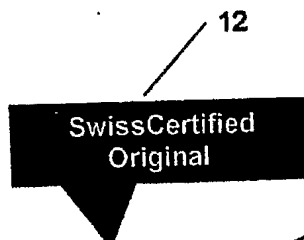
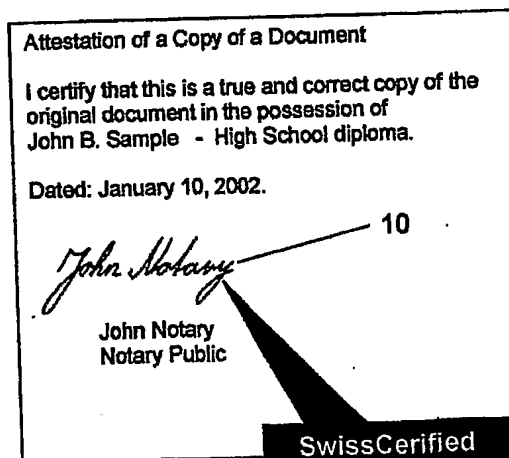
Document declaration by the owner:	
Name of Document: High School Diploma	
I the undersigned confirm that:	
1) the above named document beginning on the next page contains information which is accurate and	
2) that I am the owner of this document and have the right to display it.	
<u>December 10, 2003</u> Date	<u>John B. Langley</u> Signature of Owner

## Figure 10

Hazelton Public High School  
Hazelton, Canada  
John B. Sample

Having satisfactorily completed the requirements for graduation from the Hazelton High School as prescribed by the faculties and approved by the board of education is thereby entitled to receive this

Diploma Nr. 12345  
June 1979



BEST AVAILABLE COPY

### Figure 11

**SwissCertified  
Document**

**School Diploma**  
**John B. Sample**

Having satisfactorily completed the requirements for graduation from the Hazelton High School as prescribed by the faculties and approved by the board of education is thereby entitled to receive this

**Diploma Nr. 12345**  
June 1979



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